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CLAIMS

- 1. A method of expanding a tubular element having a first portion to be expanded to a first inner diameter and a second portion to be expanded to a second inner diameter larger than the first inner diameter, the method comprising:
- a) arranging an expandable sleeve of selected wall thickness in said second tubular element portion;

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- b) positioning an expander in the tubular element;
- c) operating the expander so as to expand said first tubular element portion to the first inner diameter, and operating the expander so as to expand the sleeve to an inner diameter substantially equal to the second inner diameter minus double the wall thickness of the sleeve; and
- d) retrieving the sleeve from the tubular element.
 - 2. The method of claim 1, wherein the sleeve and the first tubular element portion are expanded to substantially the same inner diameter.
- 3. The method of claim 1 or 2, wherein the tubular element extends into a wellbore formed in an earth formation, and wherein said second portion is an end portion of the tubular element.
 - 4. The method of any one of claims 1-3, wherein the sleeve is provided with a plurality of openings defining a pattern of a plurality of members subjected to bending upon radial expansion of the sleeve.
 - 5. The method of claim 3, wherein each said member includes a hinge section in which bending of the member is concentrated.

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6. The method of claim 5, wherein said hinge section is subjected to elastic or plastic deformation upon radial expansion of the sleeve.

- 7. The method of any one of claims 4 to 6, wherein said openings are slots extending in axial direction of the tubular element, and wherein adjacent slots are arranged in a longitudinally overlapping arrangement.
- 8. The method of claim 7, wherein each slot has opposite ends of enlarged width.
- 9. The method of claim 8, wherein said ends of each slot are formed by holes formed in the wall of the sleeve.

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- 10. The method of any one of claims 4-9, wherein step d) comprises moving the sleeve into said first tubular element portion thereby radially contracting the sleeve
- whereby said members are subjected to reverse bending.
 - 11. The method of any one of claims 1-10, wherein the sleeve is provided with latching means for latching a retrieval tool to the sleeve, and wherein step d) comprises passing the retrieval tool through the tubular
- element to the sleeve, latching the retrieval tool to the sleeve, and moving the retrieval tool with the sleeve latched thereto through the tubular element so as to retrieve the sleeve from the tubular element.
- 12. The method of any one of claims 1-11, wherein the expander is operable to expand the tubular element by movement of the expander between a radially retracted mode thereof and a radially expanded mode thereof, and wherein step c) comprises:
 - i) moving the expander from the retracted mode to the expanded mode thereof so as to expand a section of said first tubular element portion or the sleeve;
 - ii) moving the expander from the expanded mode to the retracted mode thereof;

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iii) moving the expander, or allowing the expander to move, axially through the tubular element into a further section of said first tubular element portion or the sleeve; and

iv) repeating steps i) - iii) until the expander has expanded said first tubular element portion and the sleeve.

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13. The method substantially as described hereinbefore with reference to the drawings.